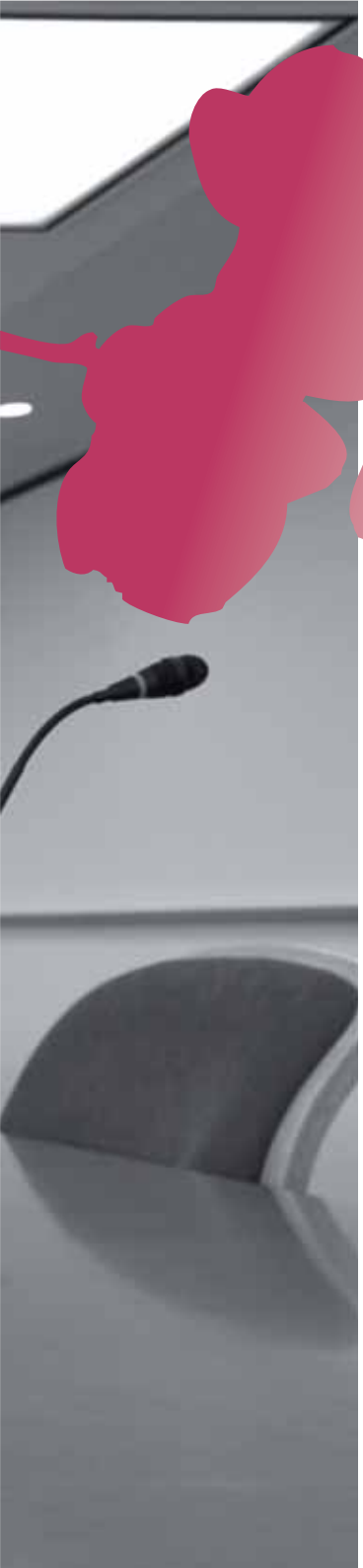
Infrared conference system - ATCS-60 Series

audio-technica
always listening



Infrared conference system

Everything begins with Audio-Technica

The infrared conference system developed by Audio-Technica offers all the advantages of infrared communication and features 100% wireless microphone units. As a result, it offers users more flexibility, with freedom to easily change microphone locations and system configurations. Even for a conference of over 100 participants, the preparation takes far less time and goes more smoothly. On the other hand, the system also features sophisticated functions, such as the simultaneous interpretation for the maximum of one native language and three foreign languages, automatic calculation of votes and questionnaires*, automatic turning of camera following the switching of speakers, accessory minutes recording, etc., which helps you improve conference efficiency and enhance related agendas.

*An additional device and software modifications are required to perform automatic calculation of votes and questionnaires.

IR conference system

Everything begins with Audio-Technica

The ATCS-60 infrared conference system has all the advantages of infrared communication complete with wireless transceiver microphone units. Wireless infrared technology provides the user with greater flexibility whilst configuring the system and freedom of choice when placing microphones. From intimate meetings to large boardrooms and events, the ATCS-60 will adapt to your needs.

Additional features include 4 selectable channels for multi-language conferences and an automated camera function facilitating audio visual integration.

The option of software control is also available, with the user able to adjust camera position and microphone settings from within the provided program.

infrared conference system (PC 491-MC 134)

As a pioneer of infrared systems Audio-Technica offers you peace of mind.

1996 - The arrival of 800MHz radio wireless products marked the beginning of Audio-Technica's work with IR technology. Resulting in sales of the ATIR series infrared microphones.

2000 - The dawn of the 21st century saw the release of the ATCS-M50 as part of the ATCS-50 series, capable of handling up to 150 microphones.

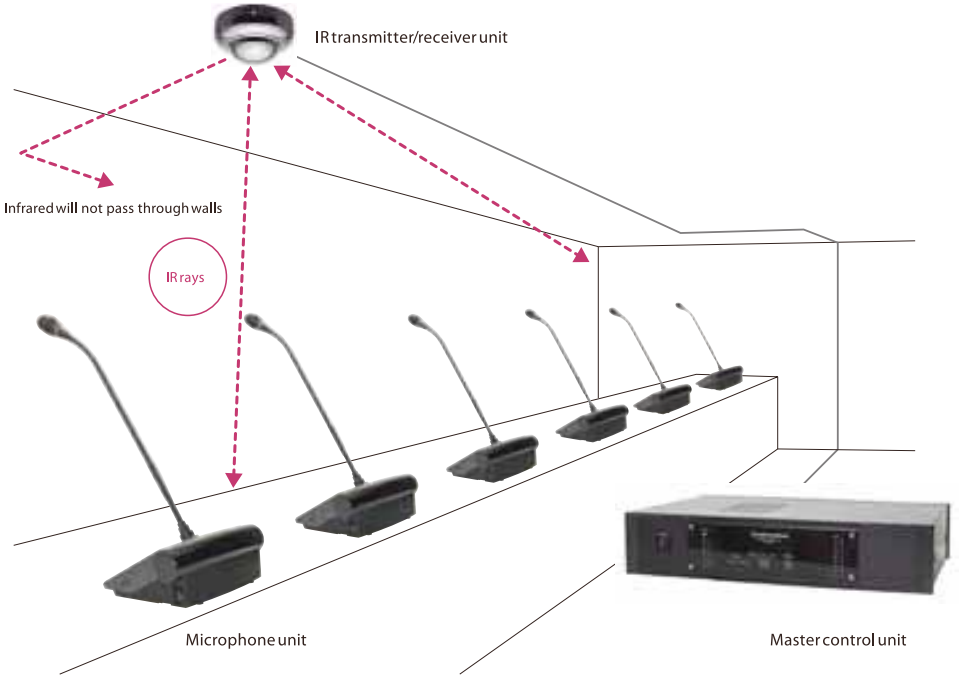
2004 - Another new addition to the ATCS-50 series is the ATCS-M55 which showcases a system which requires the smallest installation area in the industry.

2007 - Audio-Technica introduces the first fully automatic hands-free conference system with voice detection technology. By automatically recognizing the speakers voice, the microphone can be turned on and off without pressing a button.

Infrared technology keeps your information in your conference room

In the 21st century the control of information is of top priority. With the ATCS-60 conference system your wireless signal won't leave the room, let alone reach another building. When compared to a UHF wireless system which acts in the same way as a radio station transmitting over a broad area, the infrared system excels, providing no information leakage.

Infrared technology offers you peace of mind and the confidence that your information is secure.



infrared conference system (PC 491-MC 134)

General features

Flexible and easy modify
- Microphone and camera settings can be controlled by a PC running the supplied software. The upgradable structure of the system makes it easier to adapt your conference setup.

Unit selection function
- By utilising ID switch methodology, the ATCS-60 guarantees prompt and responsive unit selection.

All finish function
- The chairperson's unit has control to override all other units with the “all finish” function

Battery life indication
- When battery life is low both the power LED and microphone LED will flash rapidly as a warning.

Listening options
- Built in speaker and headphone jack with personal volume control.

Voice Detection
- The user can select automatic or manual mode. In the automatic mode, the microphone is turned on when spoken into and turned off when there is no voice. The holding time can be altered to cater for users needs. In manual mode, the simple operation of pressing the TALK (speech) button enables the on/off switching.

Simultaneous interpretation
- Up to 4 separate channels for multi language meetings, making it possible to have one mother tongue and three additional translations.

IR conference system

Wireless design for flexible configuration

Board rooms meetings, Video conferencing and general meetings

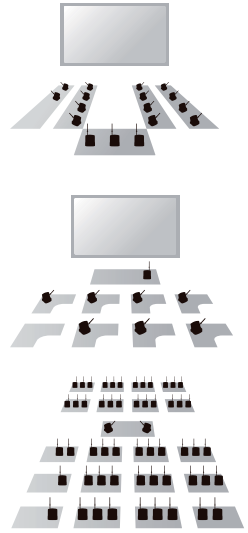
As cost is of great importance to all companies, conference rooms are increasingly utilised for other purposes. The infrared system is flexible and space efficient making it the perfect choice for such multi-purpose environments.

Remote lectures and meetings in institutions and universities

As the technology for remote lectures and meetings increase universities are introducing the remote lecture system to enhance the course agenda. A conference system with improved audio content makes communication swift and efficient.

Committee rooms and assembly halls of self-governing bodies

The semi permanent nature of the ATCS-60 means it can be seamlessly installed into any space without the hassle of exposed wires and lengthy setup times. Take it with you wherever it is required.



atcs-60 series

ATCS-M60 delegate unit (PC 491-MC 134)

Main features:
- Microphones can turn on automatically when a voice is detected.
- Unique DSP voice detection ignores the sound of rustling papers when using the automatic microphone mode.
- A built-in loudspeaker and headphone output for personal amplification negates the need for an additional P.A. system .
- It enables simultaneous speeches by up to 5 people.
- Priority setting function may enable priority to microphones other than the chairperson unit.
- 4 monitor channels are available to easily integrate multiple language translations

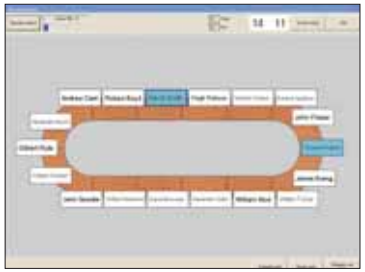
The newly voice detection circuit can automatic turning on/off of speeches (Patent under application)

The modes of “automatic” and “manual” can be selected according to the operation style.
In the automatic mode, the microphone is automatically turned on when spoken into and turned off when there is no voice. The holding time can be set at discretion, of course. Under the manual mode, the simple operation of pressing the TALK (speech) button enables the on/off switching.

ATCS-M60

Automatic mode:
Voice controlled

Manual mode:
One-touch activation



With dedicated software and PCs,
the ON/OFF operation
can be carried out from outside.

ATCS-M60 delegate unit (PC 491-MC 134)

Built-in speaker

- Volume can be adjusted at the user's discretion with the knob on the right of the main body. It can be used even without acoustic equipment.

Simultaneous interpretation equipment for 4 languages

- At an internationally oriented facility, it provides simultaneous interpretation for 4 languages and can be used effectively in international meetings.

Features of chairperson unit

Unit selection function

- Depending upon the application, the user may choose to set the ID of the chairperson unit as 001 and that of participants units as 002 and so on. If there is any malfunction in the chairperson unit, a participant unit can replace the broken one simply by changing the participant unit's ID to "001". This flexibility offers great peace of mind.

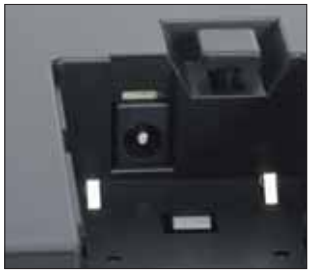
All finish and speech prohibition function

- If the priority number is set during the conference, then it is possible to terminate all the units making or requesting to make a speech as a group, except for the chairperson unit, by simply pressing and holding the TALK (speech) button of the chairperson unit (ID001) for over two seconds. In addition, holding the TALK button prohibits use of microphones other than the chairperson.

Simultaneous speech by up to 5 people

- It is possible to have five people speaking at the same time. This is most helpful when several people are giving presentations on the same topic.

Bottom switch
The ID and IR output of Microphone unit can be switched.



AC adaptor jack
Consideration is given to its operation as fixed equipment and also possibly as a commercial power source.

Optional: AC adaptor

Technical Data	ATCS-M60
Bandwidth	1 ~ 10MHz
Number of Channels	Voice 4ch, monitor 4ch and data 2ch
Modulation Method	FM modulation
Infrared Data Communication	9,600 bps
Speaker Output	8 Ω, 2W
Power Supply	Dedicated lithium-ion battery with 7.4 VDC, 2400 mAh or AC adaptor with 12 VDC, 1A (AD-SZ1210JE (optional)
Standard Operation Time	Continuous speeches: 6 hr; Signal reception status: 10 hr.
Dimensions	H75.5×W187×D149mm
Weight	0.6 kg (microphone and battery excluded)
Optional Accessories	LI-240 lithium-ion battery, AC adaptor

ATCS-60MIC

ATCS-L60MIC

dedicated microphone unit (PC 491-MC 134)

Maximum reduction of noise and vibration

- The newly developed shock-mount double-gooseneck microphones can effectively reduce noise vibration caused by the movement of desks & chairs and footsteps. The microphones are available in two lengths – the standard length being suitable for conferences and the longer length being suitable for lectures.

ATCS-60MIC

Dedicated microphone

- Overall length 43 cm

ATCS-L60MIC

Dedicated long-type microphone

- Overall length 58 cm

Technical Data	ATCS-60MIC, ATCS-L60MIC
Model	Fixed-charge back plate
Polar Pattern	Hyper cardioid
Frequency Response	200 ~ 5,000 Hz
Sensitivity (0 dB = 1V/ 1 pa, 1 kHz)	– 45 dB
Maximum Input Sound Level	100 dB S.P.L. (1kHz,THD 1%)
Signal-Noise Ratio (1kHz,1 pa)	> 61 dB
Output Impedance	< 680 Ω, unbalanced
Finish	Black, matted paint spraying
Weight	115 g (ATCS-60MIC)

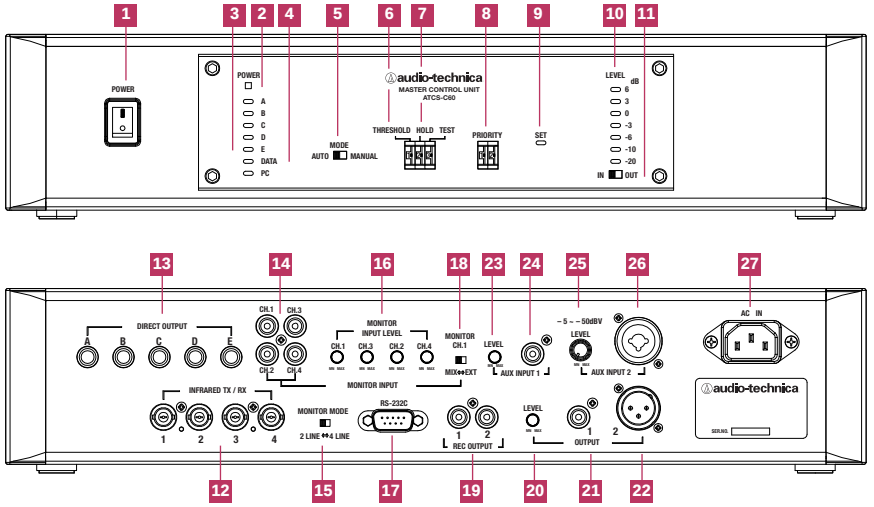
ATCS-C60 master control unit (PC 491-MC 134)

ATCS-C60

Master control unit

- The number of units with priority settings can be selected.
- Option for FIFO “First In First Out” or FILO “First In Last Out” modes when selecting which order people speak.
- Automatic mode and manual or traditional button press mode are both available.
- Adjustable threshold setting for automatic mode.
- Adjustable hold time for how long the microphone stays on after speaking.
- Direct output of up to 5 separate audio channels can be output via the software.

ATCS-C60



Technical Data	ATCS-C60
Bandwidth	1 ~ 10 MHz
Number of Channels	Voice 5 ch, monitor 4 ch and data 2 ch
Modulation Method	FM modulation
Infrared Data Communication	9,600 bps
Audio Input	Monitor input (-10dBV, unbal.) 4 systems External input 1 (-10dBV, unbal.) 1 system External input 2 (-10dBV, bal.) 1 systems (-50dBV, unbal.) 1 system
Audio Output	Direct output (-10dBV, unbal.) 5 systems Output 1(-10dBV, unbal.) 1 system; Output 2 (-10dBV, bal.) 1 system Recording output (-10dBV, unbal.) 2 systems
Power Supply	AC100 ~ 240V 50/60Hz 75W
Weight	4.2 kg (Main body only)
Accessories	2 rack adaptors, 6 rack adaptor installation screws, 5 mini drivers, AC power cord

1	Power Switch	12	Infrared TX/RX Terminals	23	AUX Input 1 Level
2	Power LED	13	Direct Outputs	24	AUX Input 1 terminal
3	Sound Signal Reception LEDs	14	Monitor Inputs	25	AUX Input 2 Level
4	DATA Signal LED	15	Monitor Mode Switch	26	AUX Input 2 terminal
5	MODE Change-over Switch	16	Monitor Input Level Controls	27	AC Inlet
6	THRESHOLD Switch	17	PC Connecting Port RS-232C (male)		
7	HOLD Switch	18	Monitor CH1 Input Change-over		
8	PRIORITY Switchs	19	REC Outputs		
9	SET Button	20	Output Level		
10	Level Meter LEDs	21	Output port 1 (unbalanced)		
11	Input / Output Level Change over Switch	22	Output port 2 (balanced)		

atcs-60 series

infrared conference system (PC 491-MC 134)

ATCS-A60

ATCS-A60

IR transmitter/receiver unit

- The ceiling or wall mounted antenna transceiver connects via 75 ohms BNC coaxial cable to the master control unit. Utilizing an automated gain gives the A60's greater IR performance.

Technical Data	ATCS-A60
Bandwidth	1~10MHz
Number of Channels	Voice 5 ch, monitor 4ch and data 2ch
Connecting Terminal	BNC terminal ×1
Power Supply	DC24V (provided by master control unit ATCS-C60)
Weight	151g
Diameter	108 mm
Depth	55,5 mm
Accessories	1 installation bracket, 2 installation bracket fixation screws

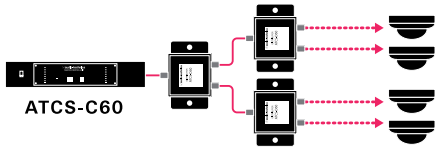
Please use 5C2V quality cable or better.
Please keep a distance of 0.5m or above from the inverter-type illuminator for installation.

ATCS-D60

ATCS-D60

Distributor

- The 1 in 2 out distributors increase the number of BNC inputs into the master control unit two fold from 4 inputs for up to 16 antenna transceiver connections covering a larger transmission area.



When 3 sets are used, one terminal can be connected to a maximum of 4 IR transmitter/receiver units.

Technical Data	ATCS-D60
Number of Distributions	2 ways
Transmission Frequency Bandwidth	1~10MHz
Connecting Terminals	BNC terminal ×3
Current Pass Through	below 30V and below 1A
Weight	167g

atcs-60 series

infrared conference system (PC 491-MC 134)

ATCS-B60

Battery Charger

- An intelligent quick-charger has 10 individual advanced monitor sockets, taking only 5 and a half hours for a full charge.

LI-240

Lithium-ion battery

- Exclusively manufactured high specification batteries especially designed for the ATCS-M60 system.

Technical Data	ATCS-B60
No. of Batteries Charged	10
Charging Time	About 5.5 hours (for LI-240 charging)
Rating Capacity	60 VA （10V 6A)
Power Supply	AC100-240V 50/60Hz (using AC adaptor of 10V 7.2A)
Weight	2 kg (excluding AC adaptor and AC cords)
Accessories	AC adaptor and AC power cord

ATCS-B60

LI-240

DMQ-60

Monaural earphone

- Monaural earphone is designed for clear intelligible audio, a comfortable fit for either ear and easy to maintain.

AC adaptor

(Optional)

DMQ-60

atcs-60 series

ATCS-C60 options software (PC 491-MC 134)

CONFERENCE MANAGER (dedicated software)
The software offers total control over the conference system including integration with video systems, speaker order,speech mode (FIFO and LIFO), number of speakers, holding time, individual volume, thresholds and a great deal more.

ATCS-C60MAG

Conference Manager Standard version free of charge with each central unit

- Setup of all basic functions of the ATCS-60;
  Manual mode up to 150 microphones;
  Automatic mode up to 50 microphones
- Overall gain
- Gain for individual delegate units
- Individual thresholds for in automatic mode
- Arrange delegate layouts with names over an image of the conference room
- Selectable speaker order modes of operation
- “Press to Request” total control mode
- Audio routing for interpretation integration

ATCS-C60MAG-REG

Conference manager extended version

- Video follows audio control (external camera required)
- Video recording
- Audio recording
- Minute taking
- Conference record

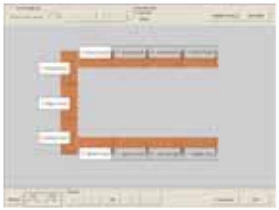
The unit making
a speech is shown in blue.

Microphone control function (ON/OFF control)

- The ON/OFF operation of microphone units can be done by clicking the speech seats on the software screen. Moreover, speech demands of participants are displayed under the chairperson priority mode so that some of the participants may be allowed to make a speech. (Such function is invalid under the automatic mode of the ATCS-60 Series.)

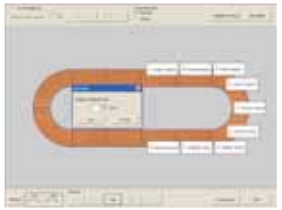
Layout example 1

Layout example 2



Deletion of seats

Addition of seats



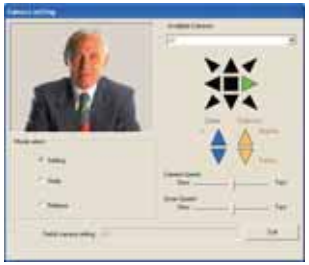
Function of layout registration & storage

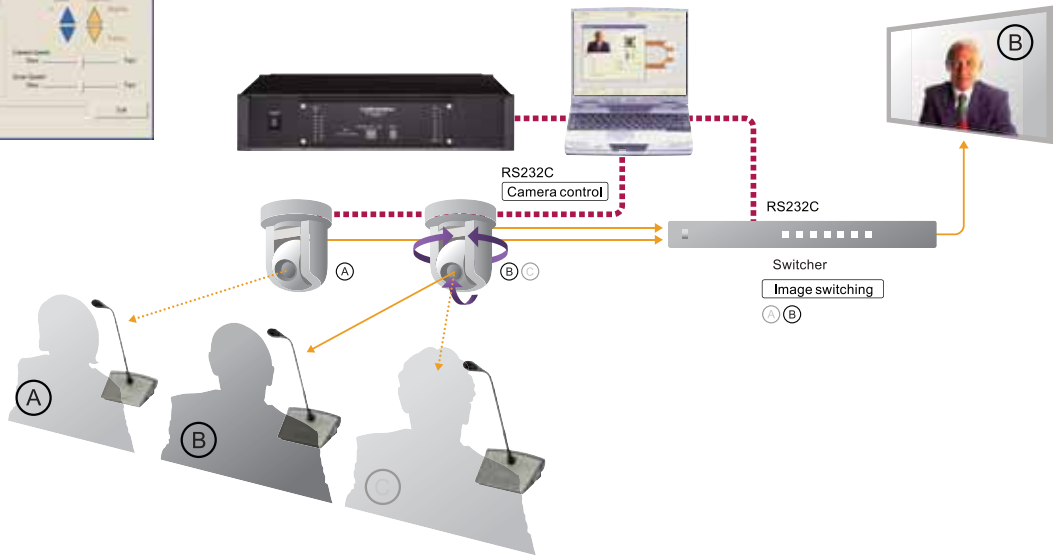
- Even for a conference in a multipurpose room, the application mode can be

ATCS-C60 options software (PC 491-MC 134)

Camera control function and image switch function

- It is possible to control cameras with RS232C signal.
  Upon registering the layout of microphone units and presetting the camera, it is possible to synchronize the two so that images of speakers will be automatically taken. Multiple cameras (depending upon each manufacturer's requirements) can be used at the same time for easy filming within a large venue. This innovative function enables videoconferencing and conference relay, and realizes great labor savings. Of course, apart from synchronization between the cameras and microphone units, it is also possible to synchronize the image switcher for timely switching of images. (This function is invalid when using the ATCS-60 Series in automatic mode.)

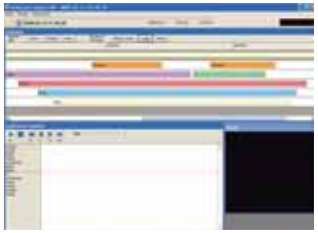




Accessory minutes recording function

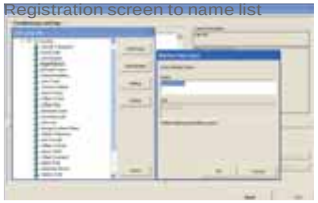
- Audio/video recording and playback function
  Records of voices, images and speakers* during the conference can be all recorded and stored on the hard disks of PCs. This function plays the records stored on the hard disks to display the conference images and all the speakers clearly. Moreover, the clips may be replayed by clicking on the speeches (speaker's name) to be confirmed. In addition, the text writing function allows the user to listen to the conference audio while making the minutes. The voice data is stored in the WMA format and the image data in the WMV format, which can both be played with the Windows MediaPlayer.

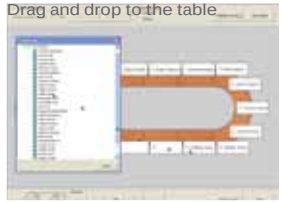
*It is different from function of automatic text creation with voice recognition.
*Speech records refer to the data indicating the starting time and length of speech of each speaker.



Name list registration function

- It is possible to register the participants by their departments and categories. When making the layout, it is possible to arrange the seats by the dragging & dropping operation.



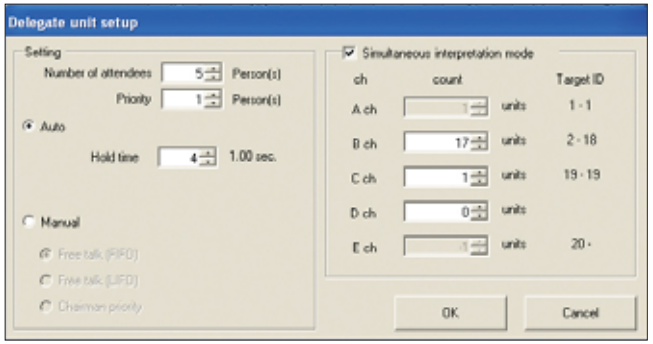


atcs-60 series

ATCS-M60 system chart (PC 491-MC 134)

The ATCS-M60 is equipped with earphone terminals and can be used as a simultaneous interpretation system for one mother tongue plus three foreign languages.
The system chart here shows the example of one mother tongue plus one foreign language.
Please contact us for details.

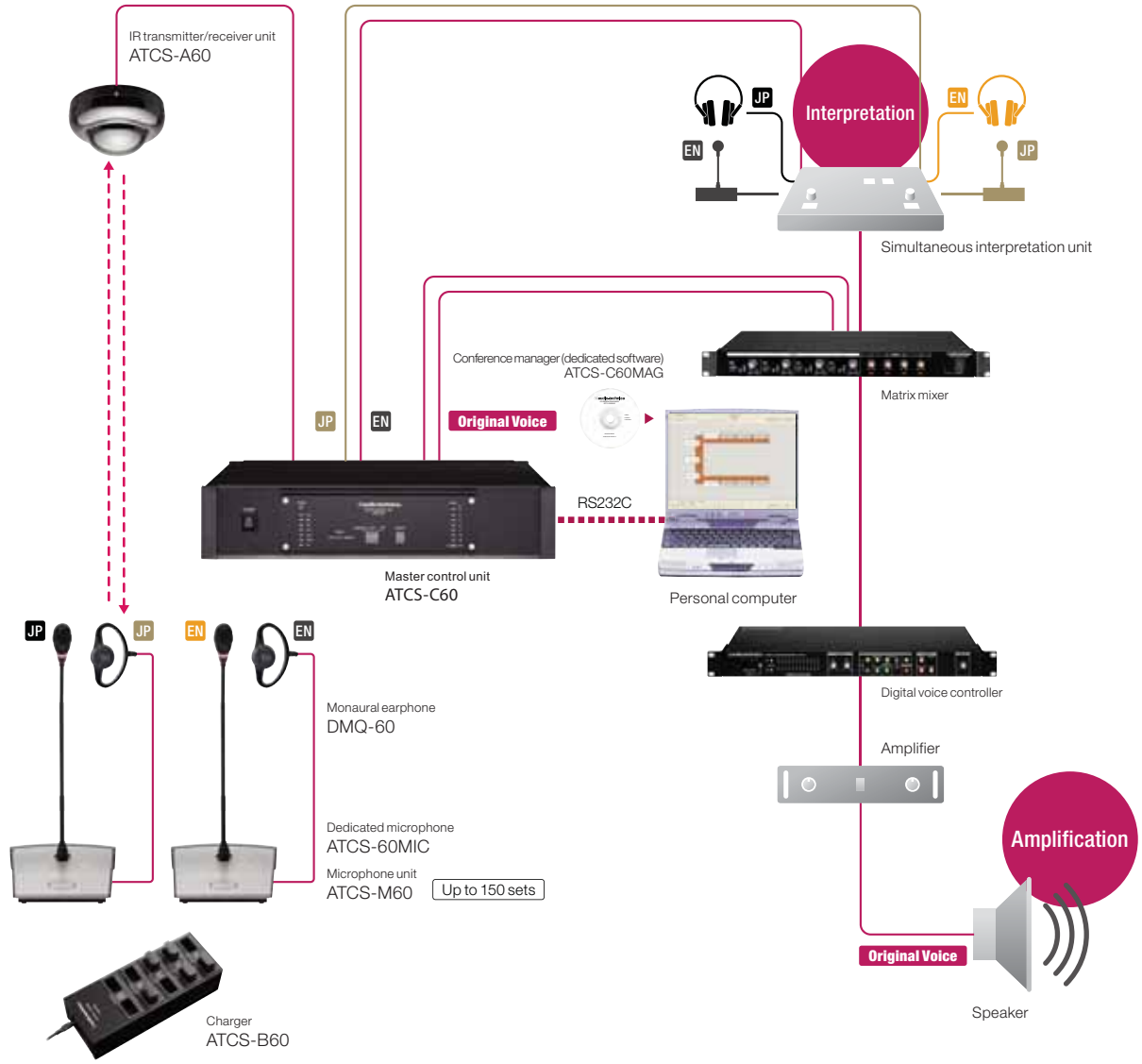
EXAMPLE OF A SIMULTANEOUS INTERPRETATION CONFERENCE



Introduction to software (ATCS-C60MAG)

- The application method varies pursuant to the number of interpreters for simultaneous interpretation.

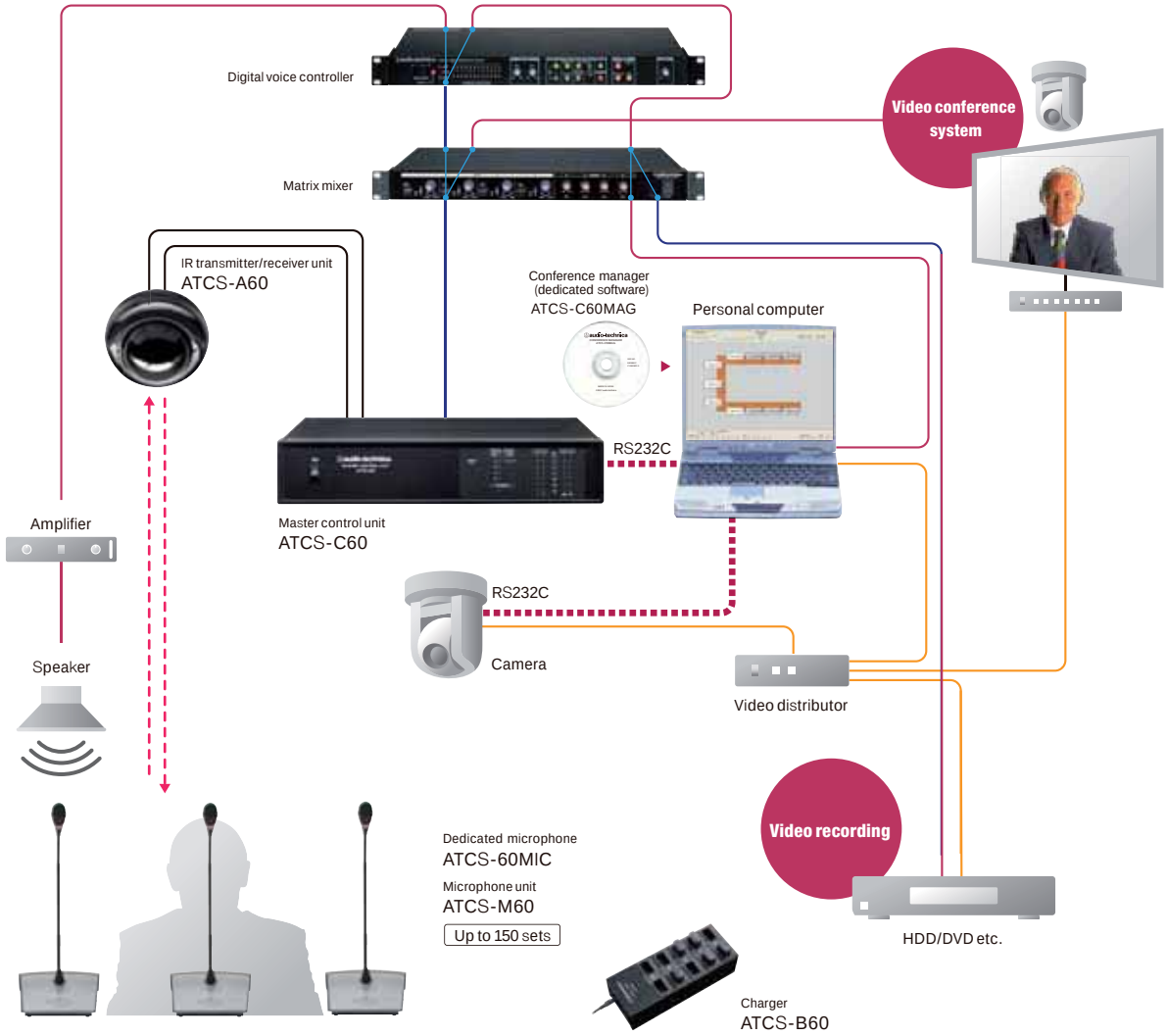
  There may be two interpreters for two different languages or one interpreter to do all the work. Therefore it is sometimes necessary to categorize the original voice of a speaker as per language and transmit it to the interpretation booth, while at other times it is just necessary to transmit the original voice to the booth. In other words, output configuration should be conducted as per the application conditions. It is easy to configure and allocate the language by using the dedicated software.



ATCS-M60 system chart (PC 491-MC 134)

The requirements include sending close-up images of the speakers during the video conference, video recording contents a board meeting, and transmitting the conference images via the Internet. And all those requirements can be easily achieved with the conference manager software (optional).
(Please refer to page 14 for the details of multiple camera synchronization)

EXAMPLE OF A VIDEO CONFERENCE AND CONFERENCE IMAGE RECORDING



Introduction to software (ATCS-C60MAG)

- The camera is synchronized according to the ON/OFF status of microphones.

  With pre-configuration, real-time operation is also possible apart from displaying the images of speakers. Moreover, images and sound taken by the camera can be stored in the PC for flexible use when making conference minutes. (Please refer to page 14 for details.)

atcs-60 series key features

		ATCS-60 Series ATCS-M60 World standard model
	Main feature	Equipped with automatic functions, not need to push button
	Number of buttons	1 Speech button (for asking and finishing)
	Loudspeakers	● (Loudspeakers ON during speeches)
	Number of monitor	4ch
	Earphone outputs	1 (4ch selection type)
FUNCTIONS	Automatic functions	● (Can be set to the manual mode at front of ATCS-C60, and then set the threshold and holding time.)
	Speech modes	Manual mode: “FIFO” and “LIFO” can be selected (at the front of ATCS-C60)
	Maximum simultaneous speakers	Five (free combination of the chairperson and participants)
	Number of speech priorities	Up to 4 people (with special channel)
	Number of speech demands	10
	Chairperson unit	Configured in ID001
	All finish function	Chairperson unit (by pressing and holding the “TALK” button) and prohibiting speeches by others (by pressing the button)
	Low battery indication	LED flashing
PERIPHERALS	Battery	LI-240 lithium-ion battery of 2,400mAh
	Standard operation time	Continuous speeches : about 6 hours
	Power saving mode	Signal reception status : about 10 hours
	Charging time	About 5.5 hours
	Corresponding charger	ATCS-B60
	Corresponding IR transmitter/receiver unit	ATCS-A60 (Up to 16 sets can be configured with ATCS-D60)
	Number of connected coaxial cables	1
	Category of microphones	Selection from ATCS-60MIC or ATCS-L60MIC (*dedicated types)
	Corresponding master control unit	ATCS-C60
	PC control	●
PC BASIS FUNCTIONS	Speech status display	●
	Battery status display	●
	Speech control	Automatic mode: Remote control impossible Manual mode: Remote control of speech / speech finish
	Automatic function	● (Switch with the manual mode) (Setting of threshold and detailed holding time)
	Speech mode	Manual mode can be selected from “FIFO”, “LIFO” and “”chairperson priority” can be selected
	All finish	Automatic mode: Remote control impossible Manual mode: Remote control possible
	Screen layout	Microphone units can be freely configured in the screen
	Individual volume setting	●
	Individual volume holding	●
	Overall volume setting	●
	Overall volume holding	●
	Individual threshold setting	●
	Individual threshold holding	●
PC MULTIMEDIA FUNCTIONS	Remaining time display	●
	Camera tracing	●
	Audio/video recording	●
	Conference playback	●
	Conference minutes making	●
	Grouping	Five groups for simultaneous interpretation

Noise or interruption may occur in the following cases. Please contact us for details. ● Multiple infrared facilities, such as the simultaneous interpretation system and the listening system, are used within the same room.
● Plasma display panels and lighting equipment emitting infrared rays (e.g., incandescent lamps and halogen lamps) are used. ● When the IR transmitter/receiver unit or the conference units are directly subject to sunlight.

notes

notes

audio-technica

always listening

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